

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for detecting an object image within image data comprising:
 - receiving image data;
 - segmenting the image data into multiple windows;
 - determining a likelihood that each window contains the object wherein each window is assigned a rank probability and probability rank ordering the multiple windows based on the step of determining; and
 - selecting a predetermined one of the multiple windows as a window wherein the object image is considered to reside.

2. (Currently Amended) ~~The method of claim 1~~ A method for detecting an object image within image data comprising:
 - receiving image data;
 - segmenting the image data into multiple windows;
 - determining a likelihood that each window contains the object and probability rank ordering the multiple windows based on the step of determining; and
 - selecting a predetermined one of the multiple windows as a window wherein the object image is considered to reside,
 - wherein the receiving step comprises:

collecting and recording the image data as the data emanates back to a receiver.

3. (Currently Amended) ~~The process of claim 1,~~ A method for detecting an object image within image data comprising:

receiving image data;

segmenting the image data into multiple windows;

determining a likelihood that each window contains the object and probability rank ordering the multiple windows based on the step of determining; and

selecting a predetermined one of the multiple windows as a window wherein the object image is considered to reside,

wherein the step of segmenting comprises:

determining a set of image metric data;

applying selection criteria to filter false detections and clutter from the image data;

comparing image data, after applying the selection criteria, with the image metric data; and

applying morphological operators on the image data.

4. (Original) The process of claim 1, comprising:

displaying at least one of the multiple windows.

5. (Original) The process of claim 2, comprising:
identifying pixels having a lighter contrast compared to other pixels in the
imagery.
6. (Original) The process of claim 2, comprising:
identifying pixels having a darker contrast compared to other pixels in the
imagery.
7. (Original) The process of claim 2, comprising:
identifying pixels having both lighter and darker contrast compared to other
pixels in the imagery.
8. (Original) The process of claim 2, comprising:
using a morphological operator to isolate targets from their background.
9. (Original) The process of claim 2, comprising:
filtering the image data using two concatenated morphological filters.
10. (Original) The process of claim 2, comprising:
detecting spatial discontinuities at a pixel level.
11. (Original) The process of claim 2, comprising:
presenting the image data of multiple windows on a display in a mosaic
format.

12. (Original) The process of claim 2, comprising:
communicating the detected window images to another system.

13. (Original) The process of claim 2, comprising:
the processing of image data comprising visual data.

14. (Original) The process of claim 2, comprising:
the processing of image data comprising thermal data.

15. (Original) The process of claim 2, comprising:
the processing of image data comprising synthetic aperture radar (SAR) data.

16. (Withdrawn) A target detection process comprising:
acquiring image data;
down-sampling the image data n-times;
processing the down-sampled image data for detecting at least one of a light
target and a dark target;
labeling subsets of the image data that may contain target data and rejecting
clutter associated with these subsets of the image data;
combining results of the image data that has been down-sampled; and
forwarding combined results to a decision making authority.

17. (Withdrawn) The process of claim 16, comprising:

a decision making authority that extracts windows and rank orders them.

18. (Withdrawn) The process of claim 16, comprising:

an image that is down-sampled n-times using a series of low pass filters that can filter in a horizontal and vertical direction.

19. (Withdrawn) The process of claim 16, comprising:

an image that has been down-sampled n-times, where n comprises a large number that can still accomplish target detection after accomplishing a larger amount of down-sampling.

20. (Withdrawn) The process of claim 16, comprising:

a filtering process performed by a six by six (6x6) convolution filter.

21. (Withdrawn) The process of claim 16, comprising:

a filtering process performed by an N by N convolution filter, where N is a number greater than or equal to one.

22. (Currently Amended) ~~The method of claim 1,~~ A method for detecting an object image within image data comprising:

receiving image data;

segmenting the image data into multiple windows;

determining a likelihood that each window contains the object and probability
rank ordering the multiple windows based on the step of determining; and
selecting a predetermined one of the multiple windows as a window wherein
the object image is considered to reside
wherein the determining is performed using an isotropic detector.

23. (Withdrawn) The process of claim 16, wherein the processing is performed using an isotropic detector.